REMARKS

Claims 1 to 20 are in this application and are presented for reconsideration. By this Amendment, Applicant has amended the independent claims.

Applicant wishes to thank the Examiner for the courtesy of a telephone interview. During this interview the status of the case and the applied rejections was discussed. During this discussion, Applicants representative mentioned several features wherein the invention takes a different approach as compared to prior art. The claim amendments made by this submission highlight aspects of the important combination which is not suggested by the prior art.

Claim Rejections - 35 U.S.C.§103

Claims 1 to 9, 12 to 15, and 17 to 20 have been rejected under 35 U.S.C.§103(a) as being obvious based on the teachings of U.S. Patent No. 5,551,627 to Leicht et al. (the "Leicht '627" reference, hereinafter) in view of the teachings of U.S. Patent No. 4,404,453 to Gotman (the "Gotman '453" reference, hereinafter).

As Leicht '627 discloses using different types of materials that have different melting temperatures, the rejection takes the position that the method steps are obvious based on the teachings of the references as a whole. However, the teachings of the prior art fail to suggest the crux of Applicant's invention.

Applicants process involves using solder material such as conventional solder alloy such as a low pelting lead/tin alloy (see page 12 lines 5 through. 7) These are single alloys, namely

they have the same mixture throughout the solder ball. As such, the entire ball has about the same melting or fusion temperature. The invention provides a selective heating of the ball, after it is placed in contact with a terminal and is positioned relative to the opposing surface. With this, an adequate bonding is achieved. However, the selective heating melts only a portion of the solder material. This allows the remaining unmelted portion to act as a spacer, achieving a spacing function as part of the overall process. This electrically conductive spacer is directly in contact with the terminal area formed by the highly conductive metal such as the nickel – containing or gold – containing alloys 18 that form the terminal area. The process allows good electrical connection, a good mechanical connection and provides for is the necessary spacing with a simple and effective procedure.

The prior art as a whole fails to suggest this combination of features. With Leicht '627 different materials are used to provide the different melting aspects in particular to form the connection. As such, Leicht '627 fails to suggest the important combination of the invention. The secondary reference and other references cited also fail to provide electrical and physical connection and spacing.

Accordingly, as the claims highlight important differences between the combination of features according to the invention and the teachings of the prior art, it is requested that the Examiner favorably consider the claims as now presented.

Further and favorable action on the merits is requested.

Respectfully submitted
for Applicant,

By:_____
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JJM/jj:tf
70408RCE3.1
Attached: Petition for Three Month Extension of Time

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SHOULD ANY OTHER FEE BE REQUIRED, THE PATENT AND TRADEMARK OFFICE IS HEREBY REQUESTED TO CHARGE SUCH FEE TO OUR DEPOSIT ACCOUNT 13-0410.